

ABSTRACT

A method is provided for controlling an engine having an intake manifold and an outlet control device coupled to the manifold for controlling flow exiting the manifold and entering at least one cylinder of the engine. The engine further includes an inlet control device for controlling flow entering the manifold. The method includes providing an engine command; calculating a desired cylinder charge based on said command; and adjusting the outlet control device to provide said desired cylinder charge. The engine command may be, for example, a driver command, such as a driver torque command. Further, the outlet control device may be implemented with a variety of mechanisms. For example, in one embodiment the outlet control device is a valve of the engine having a variable lift. In one embodiment the outlet device is a valve having variable timing. Likewise, the inlet device may be adjusted in response to a variety of parameters. For example, in one embodiment the inlet device is adjusted based on manifold pressure. Still further, engine control may also include adjusting of the inlet control device.